## M1914.3" SECTION VI.—WEATHER AND DATA FOR THE MONTH. 5-1.3 (1) SECTION VI.—WEATHER OF THE MONTH.

By P. C. DAY, Climatologist and Chief of Division.

Pressure.—The distribution of the mean atmospheric pressure over the United States and Canada, and the prevailing direction of the winds, are graphically shown on Chart VII, while the averages for the month at the several stations, with the departures from the normal, are shown in Tables I and III.

For the month as a whole the barometric pressure was above the normal over practically the entire country, especially over the west Gulf and Plains States, the Rocky Mountain and northern Plateau regions, and the Canadian Northwest. The mean values were near the normal over the Middle and North Atlantic States, the Lake region, and along the middle and southern coast of California.

The month opened with extremely low pressure on the Atlantic coast, due to the passage of a severe storm north-ward on the last day of February and the first two days of March, the lowest reading, 28.25 inches, occurring at New Haven, Conn., at 7 a. m., on the morning of the 1st. At the same time comparatively high pressure obtained over the Plains region. Barometer readings were again low east of the Rocky Mountains on the 4th-7th, while high pressure prevailed over most of the country about the 11th-15th. About the 16th to 19th a barometric depression passed eastward over the northern tier of States, and high barometer readings were again quite general over the central and southern districts on the 22d-23d, while abnormally low pressure prevailed to the northward about the 24th to 26th.

The distribution of the highs and lows for the month was such as to favor the occurrence of westerly or northerly winds as prevailing directions in the Atlantic Coast States, the Lake region, and the upper Mississippi and Missouri Valleys, while winds from a southerly direction were the rule in the west Gulf States. Over the western

districts the winds, as a rule, were variable.

Temperature.—The first decade of the month was warm from the upper Lake region westward to the Pacific and generally over the Southwest, the excess in temperature being most marked in the upper Missouri Valley and along the Pacific coast, where it ranged from 10° to 15° per day. Over the lower Lake region and Ohio Valley and from the lower Mississippi Valley eastward to the Atlantic coast the weather was cold throughout the period, especially so near the first of the month.

During most of the second decade the temperature continued high in the western districts, notably on the Pacific coast and over the Missouri Valley and Rocky Mountain regions, where the excess ranged from 10° to nearly 20°. There was a general warming up over the districts where cold weather had prevailed during the first decade, except near the Gulf and South Atlantic coasts, where it

continued moderately cool.

The early part of the last decade was cold over much of the country, but especially so in the southeastern portions, where frosts were frequent, except over the Florida peninsula. Generally cold weather prevailed over the northern districts during this period and continued to the end of the month, but in the Ohio Valley and to the southward, as well as in the Atlantic Coast States as far north as Virginia the last week of the month was warm and springlike. On the Pacific coast warm weather continued, but the excesses in temperature above the normal were not so pronounced as during the preceding decades.

For the month as a whole the mean temperature was above the normal from the Lake region and middle Mississippi Valley westward to the Pacific as well as over most of New England. From the Ohio Valley and Middle Atlantic States southward to the Gulf and over much of Texas the average temperature was well below the normal.

Extremes of temperature were not marked over any of the interior and northern portions of the country, but high temperatures prevailed on the Pacific coast from the 17th to 19th, the readings at points in California exceeding by several degrees any previous high records for March. Likewise over the southeastern districts the minimum temperatures of the 2d were the lowest ever recorded in March at points in Virginia, the Carolinas and Georgia, and they were again quite low in these districts about the 9th and the 21st.

East of the Rocky Mountains minimum temperatures of 32° occurred nearly to the Gulf coast and they were near zero in the southern portion of the Appalachian Mountain region. On the Pacific coast temperatures did not reach the freezing point, and they were not below 40° at any time during the month over the lower elevations of Cali-

Precipitation.—The geographic distribution of the precipitation during the month is illustrated on Chart V, the notable features of which are the heavy falls in the lower Mississippi Valley, especially in western Mississippi and Louisiana, and the light amounts or entire absence over

the greater portion of the Plateau region.

The precipitation for the month was above the normal in the lower Mississippi Valley and eastern Texas. Likewise in New England and New York and over smaller areas in the lower Missouri Valley and the Dakotas. With these exceptions the precipitation was quite generally below the normal in practically all districts, being especially light over much of the Plateau region, notably in Nevada, much of Utah, southern Idaho, and portions of Washington and Oregon. The amounts east of the Rocky Mountains, while mostly below the normal, were well distributed and sufficient for agricultural requirements.

Snowfall and ice.—Heavy snow occurred at the first of the month in portions of New York, eastern Pennsylvania, and adjacent States, and unusually heavy amounts fell near the end of the second decade in the Middle Atlantic States, especially in Virginia and North Carolina, but otherwise little occurred in any portion of the country. The amounts in the western mountain regions were unusually light and the ground at the lower elevations was bare throughout the month. Much of the snow at moderate elevations disappeared, and the outlook is for a somewhat reduced supply of water for irrigation, except in California and portions of middle Plateau and Rocky Mountain regions.

The heavy covering of snow over the upper Ohio drainage and the North Atlantic States remained largely unnielted until near the end of the month, when high temperatures and warm rains caused rapid melting, with attendant floods in many of the smaller streams of that region. The snow had practically disappeared from the upper Lake region by the end of the month, and the generally light fall during the winter and its early melting interfered seriously with lumbering operations in that

district.

The continued moderately cool weather and absence of heavy rains favored the slow breaking up of the ice on the rivers and its passing out without material obstruction, except in the smaller streams in the Northeastern States. The harbors of the upper Lake region remained closed, but those of the lower Lakes were mostly free of ice at the end of the month.

General summary.—Over the east-central and southeastern portions of the country the month as a whole was cold and unfavorable for outdoor occupations. Some severe frosts occurred in the east Gulf and South Atlantic States, but the generally cold weather during the preceding month had delayed the development of vegetation and no serious damage was reported, except in small portions of Florida.

Average accumulated departures for March, 1914.

	Temperature,			Precipitation.			Cloudiness.		Relative humidity.	
Districts.	General mean for the current month.	Departure for the current month.	Accumulated departure since Jan. 1.	General mean for the current month.	Departure for the current month.	Accumulated departure since Jan. 1.	General mean for the current month.	Departure from the normal.	General mean for the current month.	Departure from the normal.
New England	*F. 33.1 37.1 49.5 65.4 53.0 55.0	-4.4 -4.3 -4.3	- 4.8 - 3.3 - 5.4 - 4.0 + 1.1	3. 51 8. 13 2. 37 0. 90 4. 00 3. 51	0.00 0.50 1.90 1.40 1.80 +0.40	Inches -1.00 -0.60 -2.30 -1.20 -0.40 -2.20	6. 4 6. 1 4. 6 4. 4 5. 0	+0.7 +0.4 -0.3 -0.6 -0.2 -0.1 +0.4	72 69 74 68 67	P.ct. + 2 - 6 - 3 - 5 - 5
Lower Lakes Upper Lakes North Dakota	31.8 28.0 26.2	-1.1 + 0.5	- 5.3	3.05 1.58	+0.40	-0.40 -1.00 -0.20	6.5 6.3	-0.1	78 77	+ 2 + 2 - 2 0
Upper Mississippi Valley. Missouri Valley. Morthern slope. Middle slope. Southern Plateau. Middle Plateau. Northern Plateau. North Pacific. Middle Pacific. South Pacific.	36. 8 38. 1 35. 0 43. 8 53. 0 52. 4 43. 7 44. 9 47. 8 55. 7 60. 6	+2.0 +4.2 +1.3 -0.2 +1.4 +3.4 +4.6 +3.6 +4.4	+ 9.2 +13.8 + 9.9	1.86 0.68 1.05 0.39 0.51 0.37 0.56 2.66	-0.10 -0.50 -0.40 -0.60 -0.90 -1.00 -2.30	-1.40 -0.30 -0.70 -1.00 -2.30 -0.50 +0.20 +1.50 +0.50 +4.60	5.4 5.5 4.4 8.8 2.4 2.9 5.8 6.9	+0.3 $-1.5$	69 64 59 50 47 50 58 81 69	+ 2 - 3 - 3 - 1 - 5 +11 - 6 - 8 + 6 + 5

In the middle-western districts the weather was more favorable and much outdoor work was possible. Decided changes in temperature were infrequent, and wheat and grass appear to have come through the winter in excellent condition.

In the districts from the Rocky Mountains westward the month was favorable throughout, except that little precipitation occurred and the outlook for irrigation water was not improved. Vegetation advanced rapidly in the southern portions and was in good condition at the end of the month.

Maximum wind velocities, March, 1914.

Stations.	Date.	Ve- locity.	Direc- tion.	Stations.	Date.	Ve- locity.	Direc- tion.
		Mi/hr.				Milhr.	
Atlanta, Ga	1	52	nw.	New York, N. Y	18	52	w.
Block Island, R. I	1	84	e.	Do	19	61	nw.
Boston, Mass Buffalo, N. Y	1	50	е.	Norfolk, Va	1	55	w.
Buffalo, N. Y	2	50	nw.	Do. North Head, Wash	2	60	w.
Chattanooga Tenn	17	51	nw.	North Head, Wash	1	50	5.
Cheyenne, Wyo	. 4	54	w.	D0	1 3	52	50.
Do	15	62	w.	Do		54	50.
Do	24	58	w.	Do		82	58.
Do	25	50	sw.	Do	30	56	se.
Cleveland, Ohio	2	50	nw.	Oklahoma, Okla	10	52	n.
Eastport. Me	1	52	ne.	Do	19	50	n.
Do	2	60	ne.	Do	28	54	5.
Do	6	56	ne.	Point Reyes Light,	l		
Do	7	54	ne.	Cal	1	59	nw.
Hatteras, N. C	1	54	nw.	Do	2	55	nw.
Do	2	58	nw.	Do	28	68	5.
Lander, Wyo	27	56	sw.	Do	29	67	5.
Lynchburg, Va	1	50	nw.	Port Huron, Mich	1	50	nw.
Do	2	55	nw.	Portland, Me	1	55	0.
Modena, Utah	23	51	S.	Providence, R. I	Ī	58	S6.
Mt. Tamalpais, Cal.	1	62	nw.	Do	19	50	nw.
Mt. Weather, Va		110	nw.	Sand Key, Fla	ī	54	nw.
Do	i 2	108	nw.	Sandusky, Ohio	lī	56	nw.
Do	3-	72	nw.	Savannah, Ga	i 1	62	nw.
Do	4	50	nw.	Savannah, Ga Tatoosh Island,	-		
Do	18	62	nw.	Wash	1	65	SW.
Do	19	74	nw.	Do	3	50	8.
Do	20	58	nw.	Do	Ō	54	8.
Nantucket, Mass	1	86	se.	Do	13	58	g.
Do	6	57	ne.	Do	30	52	8.
Nashville, Tenn	ĺ	52	nw.	Toledo, Ohio	25	55	SW.
New Haven, Conn	1	58	ne.	Trenton, N. J.	1	58	DW.
New York, N. Y	1	84	nw.	Washington, D.C	Ī	56	BW.
Do	2	72	nw.	Do	2	60	DW.